Abstract

This invention provides caspase inhibitors of formula ${f I}$:

$$R^{5} \stackrel{R^{4}}{\longrightarrow} Q \stackrel{Q}{\longrightarrow} R^{2}$$

$$Z \stackrel{R^{3}}{\longrightarrow} R^{3} \stackrel{R^{2}}{\longrightarrow} Q$$

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wherein Z is oxygen or sulfur; R^1 is hydrogen, -CHN₂, R, CH₂OR, CH₂SR, or -CH₂Y; Y is an electronegative leaving group; R^2 is CO_2H , CH_2CO_2H , or esters, amides or isosteres thereof; R^3 is a group capable of fitting into the S2 subsite of a caspase enzyme; R^4 and R^5 are taken together with the intervening nitrogen to form heterocyclic ring and R is as described in the specification. The compounds are effective inhibitors of apoptosis and IL-1 β secretion.